What is claimed is:

1. An electronically adjustable attenuator, comprising:

an input terminal and an output terminal;

a high frequency signal path coupled between said input and output terminals for conveying high frequency signals from said input terminal to said output terminal;

a low frequency signal path coupled in parallel with said high frequency signal path for conveying low frequency signals between said input terminal and said output terminal;

wherein said attenuator is compensated by adjusting gain of said low frequency signals conveyed by said low frequency signal path.

2. The attenuator of claim 1, wherein

said high frequency signal path comprises a capacitive divider;

said low frequency signal path comprises a resistive divider; and

said resistive and capacitive dividers being coupled to said input terminal and having a common tap point;

said attenuator further including:

a variable gain amplifier having an input terminal coupled to said common tap point and having output terminal for providing gain adjusted low frequency signals.

3. The attenuator of claim 2, wherein

said gain adjusted low frequency signals are coupled to a second end of said resistive divider.

4. The attenuator of claim 3, further including:

an inverting amplifier for receiving said gain adjusted low frequency signals, and generating an inverted representation of said gain adjusted low frequency signals at an output;

a second resistive path coupled between said output of said inverting amplifier and said input of said attenuator for conveying said inverted representation of said gain adjusted low frequency signals to said input of said attenuator.

5. The attenuator of claim 4, wherein:

said second resistive path includes a second resistive divider having a center tap; and said attenuator further includes,

a second capacitive divider having a first end coupled to said input terminal of said attenuator, a center tap, and a second end couple to a point of reference potential, said center taps of said second resistive divider and said second capacitive divider being coupled together; and

a selection circuit having a first input coupled to said centertap of said first resistive divider, a second input coupled to said center tap of said second resistive divider, and an output selectively coupled to one of said first and second resistive dividers.

6. The attenuator of Claim 5, further including:

offset circuitry disposed within said low frequency compensation path for receiving said low frequency compensation signal and adding an offset signal there to.

7. The attenuator of Claim 4, further including:

offset circuitry for receiving said low frequency compensation signal and adding an offset signal there to.

8. The attenuator of claim 3, wherein:

said variable gain amplifier includes circuitry for generating an inverted representation of said gain adjusted low frequency signals at a second output; and

said attenuator further including a second resistive path coupled between said second output of said variable gain amplifier and said input of said attenuator for conveying said inverted representation of said gain adjusted low frequency signals to said input of said attenuator.

9. The attenuator of claim 8, wherein:

said second resistive path includes a second resistive divider having a center tap; and said attenuator further includes

a second capacitive divider having a first end coupled to said input terminal of said attenuator, a center tap, and a second end coupled to a point of reference potential, said center taps of said second resistive divider and said second capacitive divider being coupled together; and

a selection circuit having a first input coupled to said center tap of said first resistive divider, a second input coupled to said center tap of said second resistive divider, and an output selectively coupled to one of said first and second resistive dividers.

10. The attenuator of Claim 9, further including:

offset circuitry for adding an offset signal to said low frequency compensation signal and for adding an inverted representation of said offset signal to said inverted representation of said low frequency compensation signal.

11. The attenuator of claim 1, wherein

said high frequency signal path comprises a capacitive divider;

said low frequency signal path comprises a resistive divider; and

said resistive and capacitive dividers have a common input terminal, a common tap point, and a common terminal coupled to a point of reference potential;

said attenuator further including:

a lowpass filter for selecting low frequency signals; and

a variable gain amplifier having an input terminal coupled to said common tap point and an output terminal coupled through said lowpass filter to said output terminal of said attentuator for providing said gain adjustment for said low frequency signals.

12. The attenuator of claim 1 further including:

a first amplifier; wherein

said high frequency path comprises a capacitor disposed between said input of said attenuator and an input of said first amplifier, and a feedback capacitor disposed between an output of said first amplifier and said input of said first amplifier;

said low frequency path comprises a resistor disposed between said input of said attenuator and said input of said first amplifier, and a feedback resistor disposed between said output of said first amplifier and said input of said first amplifier; and

a variable gain amplifier for adjusting low frequency gain, said variable gain amplifier being coupled within said low frequency path between said output of said first amplifier and said feedback resistor.